

Claims

What is claimed is:

1. A printing process whereby lenticular lenses can be printed upon directly with a variety of low cost color inkjet printers 600 DPI and above as well as wide format inkjet printers.
2. The inkjet printing of claim 1 that is accomplished without requiring film or complex interlacing techniques to print directly on the lens sheets.
3. The lenticular lenses of claim 1 that can be cut and printed for 3-D and animation images either horizontally or vertically and in different sizes including rolls.
4. The lenses of claim 2 that are aligned either 90⁰ from or parallel to the alignment bars of desktop printers and wide format printers depending on the lens orientation creating exact registration.
5. The printing process of claim 2 that requires directly printable lens material of minimal thickness and increased lines per inch to maximize print quality and results of lenticular imaging.
6. The use of thinner lens material that is softer and more pliable for ease of insertion into all types of printers without reducing the quality of the image.
7. The lenses of claim 1 that take the place of laminating to protect the ink.
8. The clear inkjet coating material that is applied to the back of the lenticular lens in the correct process to provide proper adhesion for the coating and printability.
9. The use of a white lens coating material that is inkjet printable through the coating to replace solid white adhesive backing.
10. The white lens coating material of claim 7 that is microporous allowing backlit light through the lens.
11. The microporous white lens coating material in claim 8 that provides a white background for the images printed on the lens.

12. The white lens coating material of claim 7 that is quick dry preventing the printed roll from sticking, causing quality problems with the printed image.

13. The white lens coating microporous material of claim 8 that increases the resolution of the lens when printed.

14. The white coating material of claim 7 that allows 3-D animation printing on the back of lenses in an easier, lower cost, process for both desktop and wide format printers reducing the process by one step.

15. The white coating material of claim 7 that allows wide format printers to recognize the lenticular clear lens to enable the printing process.

16. The white coating material of claim 7 that provides UV protection for longer ink life for the image.

17. The white coating material of claim 7 that will not show scratches or fingerprints.

18. The white coating material of claim 7 that avoids the necessity for hot or cold lamination that would cause distortion of the image.

19. The white coating material of claim 7 that eliminates the need for single side lamination that causes curling of the final product.